

Docket No: PAPIERNIK-3  
Serial No: 10/811,073

**AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES  
MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS**

1. (Currently amended) A device for determining the position of a tool and/or a load-bearing machine component of a machine tool or production machine, comprising:
  - a primary crossbeam disposed between and attached to two movable support elements and supporting the tool or the machine component,
  - a rigid secondary crossbeam extending substantially parallel to the primary crossbeam and disposed between and supported by the two support elements; and
  - a contactless measuring unit connected with the primary crossbeam and constructed to measure a deflection of the primary crossbeam relative to the secondary crossbeam.
2. (Original) The device of claim 1, wherein the deflection is dependent on at least one of an acceleration force, a weight and a processing force exerted on the tool or the machine component.
3. (Original) The device of claim 1, wherein the secondary crossbeam has a stiffness perpendicular to a travel direction of the tool or the machine component that is greater than a stiffness of the primary crossbeam.

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4. (Original) The device of claim 1, wherein the secondary crossbeam is made of a carbon composite.
5. (Original) The device of claim 1, wherein the measuring unit is arranged in close proximity to the tool or the machine component.
6. (Original) The device of claim 1, wherein the measuring unit is constructed as a measuring instrument using laser triangulation.
7. (Original) The device 1, wherein the measuring unit emits a laser beam for measuring a distance between the primary and secondary crossbeams.
8. (Original) The device of claim 1, wherein the secondary crossbeam includes a metallic surface, with the measuring unit being constructed for inductive or capacitive measurement.
9. (New) The device of claim 1, wherein the support elements are movable in a direction of motion perpendicular to a longitudinal extent of the primary crossbeam.

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10. (New) The device of claim 1, wherein the secondary crossbeam has a cross-sectional profile defined by a height and a width sized to maximize a geometrical moment of inertia of the secondary crossbeam in the direction of motion.
11. (New) The device of claim 10, wherein the profile is rectangular, with the geometrical moment of inertia governed by  $I_0 = h \cdot b^2 / 12$ , wherein  $I_0$  is the geometrical moment of inertia,  $h$  is the height, and  $b$  is the width.